



NITE-TIMES NEWS

CHICAGO AREA TIMEX USERS GROUP

Chicago Area Timex Users Group
Volume 3, Number 3

Downers Grove, Illinois
May/June 1989

MEMORY MAP

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C.A.T.U.G. CLUB OFFICERS

Here is the list of 1989 club officers and how to contact them. The club has two strong SIGS, SPECTRUM/TS2068 and QL. If you have questions about either of these fine machines or even the ZX81/TS1000/TS1500 call one of the officers for direction.

| POSITION | NAME | PHONE | PRIMARY FUNCTION |
|----------------|------------------|----------|------------------------|
| President | Butch Weinberg | 576-8068 | The buck stops here... |
| Vice-President | Gary Lessenberry | 473-9415 | Meeting Planning, etc. |
| Secretary | Bob Swoger | 837-7957 | Records and Reporting |
| Treasurer | Al Feng | 971-0495 | Dues and Purchasing |

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NITE-TIMES Information

The Nite-Times News is the newsletter of the Chicago Area Timex Users Group. For an annual fee of \$10.00 you can become a CATUG member with full membership privledges. Send your dues to :

CATUG Treasure Al Feng
15 Wake Robin Ct.
Woodridge, IL 60517

The Chicago Area Timex Users Group is pleased to exchange newsletters with other Timex and Sinclair supporting users groups. If you desire to reprint any articles that appear here, please provide credit to the author and this newsletter. If you have any suggestions or would like to submit an article, please contact:

NITE-TIMES NEWS EDITOR
Bob Swoger
613 Parkside Circle
Streamwood, IL 60107

It is prefered that you call:
H312/837-7957 or W312/576-8068

NITE-TIMES CONTRIBUTIONS

If you would like to contribute an ARTICLE to the newsletter put a file in your CATUG PDP 11/60 account called NITETIMES.ART If you have special buy information place a file in your account named COMPUTER.BUY If you have a WANT AD for the newsletter put a file in your account called COMPUTER.ADS If you have information on a Special Interest Group place a file in your account called SIG.NWS

These files will be gathered by the BBS and downloaded to the editor. If you don't have a CATUG account either get one or contact the editor by mail, phone, or in person.

CONTRIBUTORS TO THIS ISSUE

Butch Weinberg
Al Feng
Bob Swoger

CLUB MEETINGS

The Chicago Area Timex Users Group meets on the second Saturday of each month in the Downers Grove Public Library's Conference Room on the second floor from 12:00 to 5:00 PM. The library is located at 1050 Curtiss Street in Downers Grove.

The CATUG coordinator for our meetings is Steve Cooper and he can be contacted during the evening at 312/968-3553.

DATA INTERRUPT

As of this mailing, there is a new Club Librarian. Up to this time it was Gary Lessenbery but his work life had interrupted his ability to preform in this capacity. Instead, Bob Swoger has consented to take over this responceability. Fear not, Gary will still be looking over our shoulders, keeping us on track. Please NOTE that there is a new ADDRESS to send your newsletter to. It is:

CATUG - C/O Bob Swoger
613 Parkside Circle
Streamwood, IL 60107

Thank you!

From the Presidents Desk:

Have you taken advantage of new products for your machine? Do you have any applications you are using that are not word processors or spread sheets? What are you doing? We would like to hear, see and learn about the fun you are having with your Sinclair Machine.

Sound applications, color graphics, Desk-Top publishing and simple CAD is now in the homes of many of our members. I know that some of you are interested in the new elements of computer to computer communication. Please share your interests with your fellow user group members.

We will continue to emphasize club activity based on keeping the interest in the T/S2068 and QL alive by providing exposure to current software and hardware used by you, our club members. Your suggestions and participation are needed and welcome.

We now have a 24 hour BBS and encourage you to exchange mail and contribute to the Download Section. Use it and have fun!

Butch Weinberg, President
Chicago Area Timex Users Group.

TREASURY NOTES

After our last mailing expense of \$12.95 our balance stands at \$227.05 . Our current paid membership stands at 24.

Al Feng, Treasurer
Chicago Area Timex Users Group

SECRETARY'S NOTEPAD

MAY 13th Meeting

Butch Weinberg called the meeting to order at about 1:30 PM. We all wanted to here about his trip to the CATS CAPITALFEST as he was the only one from our group that could make the trip. Hopefully he will write on the subject in the near future. He said that ZEBRA Systems was there but had very little more info for us 2068 users. He did however have much news on the QL products there including a MS-DOS to QL interface.

He also said that both QUANTUM LEVELS and TIME DESIGNS would be sent out again in the next two months.

Bob Swoger announced that the LarKen RAM-DISK kits were in and that construction had begun. The way the LarKen DOS breaks down in price is:

DOS Cartridge\$68
250K RAM-DISK kit\$20
Disk Drive Interface\$52

That makes the RAM-DISK only version \$88 and the full blown LarKen DOS interface w/RAM-DISK \$140. Two members have ordered one of each and Bob is building up the RAM-DISKS.

Butch then brought up before the membership the continuation of holding meetings in the home of Steve Cooper. The membership was in favor of this arrangement as the location is within 2 blocks from the Downers Grove Library and, as Steve has machines set up at all times, must less work has to be done to set up demos for meetings.

Al Feng gave the 2068 group a demo on the QL of how the

missing VAL function could be done. Apparently Fred NachBaur missed it too and wrote in QUANTUM LEVELS 1:3 how to fix it. To see what it can do in the T/S2068 see Bob Swogers article in this issue.

June 10th Meeting

Butch, Al and Steve put on a NETWORKING show for us on three QLs. One QL acted as a file server for the other two much the same way that IBM PCs and MACs do in the business environment. See Al's article this issue.

Bob announced that the LarKen 256K RAM-DISKS had been completed and that the first went to Frank Mills with all 256K aboard. Frank has the \$88 version with a SPECTRUM ROM and Swogers OS-LKDOS, the operating system that he wrote.

Larry Sauter has the \$140 full blown version also with the SPECTRUM ROM and Swogers OS-LKDOS.

Both RAM-DISKS worked the first time.

Frank had his system at the meeting and impressed NAZIR with the speed of getting from one program to another. The time to get from turn-on, thru DISKS.B1, into Mterm II to the point of dialing up the CLUB BBS is less than 10 seconds. The same routine except into TASWORD II and loading in a WP file is under 8 seconds. When exiting any file you are taken back to L.B1, the name of the OS-LKDOS program. QUANTUM LEVELS will publish these two programs in up coming issues.

Jim Brezina gave a RLE demo on the T/S2068. RLEs have been uploaded to the BBS but arrived in bad shape. The best way to get them there and back down

again is WITH THE HEX mode of MTERM II. Bob promised to at the RLE PIX monitor to OS-LKDOS.

Bob Swoger, Librarian
Chicago Area Timex Users Group

SYSOPS TWISTED PAIR

We have finally aquired the PDP 11/23+ from our friends in AVL. The move came fast and furious! The new machine is in our computer room and is waiting until after July 4th to start it up. The plan is to get both machines up at once so that there is no downtime caused by switch over.

We know of some problems with the new machine but Eddie and I hope they can be over come.

We had some downtime in late May and early June. The trouble was found to be flies in the disk-drives filters. Their little wings impeded the air flow and the system drive kept shutting down. This is due mainly to the broken promises of Facilities. We will try for screen wire over the top of our enclosure and some kind of flexable molding under our door. Smokers remains have been found on our floors and I am sure we are getting tobacco tars in our disk-drive filters. When the air flow over the disks slows down sensors shut the drives down. Changing the filters was the answer.

Bob Swoger, SYSOP ----GATOR----

FOR SALE THROUGH THE CLUB

Ron Hansen is the chairman for the following: X60729

| | |
|-----------------------|--------|
| 5.25" Disks DSDD..... | \$1.50 |
| 5.25" Disks DSQD..... | \$1.00 |
| 3.5" Disks DSDD..... | \$1.00 |
| 3.5" Disks DSQD..... | \$4.00 |

%%
B & B Computer Supplies of
Elk Grove village carries:

Ribbons
Diskettes
Printer Paper by the case
9 1/2 X 11 15# 3500 Sheets
Fan-Fold Pin Feed\$30

Printer Paper by the case
9 1/2 X 11 20# 2700 Sheets
Fan-Fold Pin Feed\$28

Printer Paper by the box
9 1/2 X 11 15# 1000 Sheets
Fan-Fold Pin Feed\$10.95

Printer Paper by the box
9 1/2 X 11 20# 1000 Sheets
Fan-Fold Pin Feed\$13

Contact:
Joe Becker 312/860-2906

SPECIAL DEALS AND BUYS

CLUB POLICY REGARDING SPECIAL PURCHASES

Each special buy will have a CHAIRMAN who will coordinate ALL ACTIVITY regarding a purchase. The CHAIRMAN will publicize the special buy through the newsletter and at the CATUG meetings. All interaction will go through the CHAIRMAN and all checks will be sent to him, payable to the CHAIRMAN.

When the purchased goods arrive, the CHAIRMAN will see that they are distributed. All special buys must be PAID IN ADVANCE because the CATUG does not have enough funds to handle all of the buys without cash flow problems. So you MUST SEND A CHECK TO THE CHAIRMAN BEFORE THE DEADLINE or you will not be included in the special buy. The CHAIRMAN will contact the members on his interest list regarding deadlines and purchase price and it will appear in the newsletter.

Bob Swoger is the chairman
for the following:
%%
256K RAM-DISK KIT for T/S 2068
%%
LarKen RAM-Disk Operating
system board built and tested,
256K RAM-DISK board with
connectors only, no IC's. The
Disk Drive controller board can
be added later to control up to
4 more double sided drives.
Battery back-up, all system
software.
**** \$88.00 postage paid. ***
Contact the chairman for more
details. There is no Qty. buy
necessary. Room 1230 X68068

QL NETWORKing
by Al Feng

Claims abound for computer
hardware and software. The
original designs -- and, claims
-- for SINCLAIR's QL, included
the promised capability of a
PEER/PEER NETWORK. Unfortunately,
reality interferes with
claims (design?) and a standard
QL is a stand alone computer.

Make no mistake. NETWORKing is
possible with several QLs via a
FILE-SERVER/CLIENT NETWORK.
This is made possible by the
multi-TASKing capabilities of
the Qdos operating system with
the assistance of SuperTOOLKIT
coding on each participating QL
(both authored by Tony Tebby).

A simple FILE-SERVER/CLIENT
NETWORK was demonstrated at the
May CATUG meeting whereby
Butch's TRUMPed-up QL acted as
the FILE-SERVER and Steve's
diskless 128K QL acting as the
CLIENT (a SuperTOOLKIT EPROM
was attached via the ROM port).
Constraints of physical space
precluded linking more QLs
together; but, as many as 63
CLIENTs may be "serviced" by a
single FILE-SERVER.

To implement the NETWORK the

following commands were typed into each computer:

```
(BUTCH's QL)      (STEVE's QL)

NET 1 <ENTER>    NET 2    <ENTER>
FSERVE <ENTER>   NFS_USE flp,
                  nl_flp1_,
                  nl_flp2_ <ENTER>
```

The computers were connected with a shielded cable having 1/8" microphone jacks (included with the QL) via the NET ports located next to the POWER socket. If we had wanted to connect more QLs, we would have indicated a 'NET number' (eg., NET 3) for the CLIENT followed by the NFS_USE statement. We could have alternatively accessed Butch's RAM disks, or microdrives (limited to a choice of two of any combination).

After establishing his QL as the FILE-SERVER, Butch loaded in a copy of XCHANGE which he had purchased at the CAT FEST. We LOADED a copy of QLSS from one of Butch's disk into Steve's QL.

LOADing via the network was slower than direct (dedicated) access to the disk drives. There are at least two reasons for this. First, communication is done at a rate of "only" 19,200 baud. And, secondly, the transmission is not continuous because the SERVER is periodically checking for "other" input. That is, the NETWORK is being multi-TASKed along with SuperBASIC and whatever else the user may have EXEC'd on the FILE-SERVER.

Multi-TASKing tends to slow effective program/TASK speed. In part, this is because each TASK is given a priority number between 0 (off) and 127 (maximum), with 32 being the "standard" priority given to

either SuperBASIC or an EXEC W'd program. It appears that background TASKs are suspended by the operating system. While the "server priority" appears to be '8', the SERVER must constantly monitor the NETWORK for any communication from CLIENTs and allow access to its I/O storage devices. In effect, we "disabled" Butch's QL while we were accessing his drives; and, "crippled" it for normal use.

NETWORKing on the QL clearly has some drawbacks. But it should be noted that this "crippling" effect occurs in all LOCAL AREA NETWORKs. In the non-SINCLAIR world, a single computer is dedicated to the TASK of acting as the FILE-SERVER (eg., a mainframe, a minicomputer, or 286/386). This should be taken as the model for QL NETWORKing, also, whereby a single QL acts as the FILE-SERVER, and more than one other QL act as the CLIENTs. This becomes a valid application when several computers wish to share a common source of data (i.e., from a hard-disk). Use of a NETWORK appears to be impractical for "home" applications.

The following SuperBASIC program may be used to assist in the implementation of CLIENT stations on a FILE-SERVER/CLIENT NETWORK:

```
10 WINDOW#0,448,52,40,204:PAPER
#0,7:INK#0,0
20 WINDOW#1,512,256,0,0:WINDOW#
2,448,226,40,30
30 CLS: PAPER 7: INK 0:INK#1,3:
CSIZE 0,0
40 PRINT#0\,[' ' ;VER$;' ROM ] ' ;
\, FREE_MEM;' bytes'
50 CSIZE 2,1
60 INPUT,\\\\" , "NETWORK STATION
NUMBER: ";a$: NET a$
70 NFS_USE flp,nl_flp1_,nl_flp2_
80 CLS: INK 37:PRINT,\\\\" , "NE
```



```
TWORK";: INK 0:PRINT " CLIENT S
TATION";: INK 2:PRINT" { ";:INK
0: PRINT a$;:INK 2:PRINT " }"
90 FOR n=0 TO (a$-1):BEEP 250,10
:PAUSE 8:NEXT n
100 REMark ***** CLIENT (PLATYP
US Software 1988) *****
```

SAVE this program as either BOOT or CLIENT BAS. If you have a hard-disk, then you may wish to change line 70 to read:

```
70 NFS_USE flp,nl_flp1_,nl_hdk1_
(?)
```

to access the hard-disk when a call to 'flp2_' is made by the CLIENT. Line 90 provides an audible confirmation of the station number. The program "terminates" with the active cursor in 'window#0'. Either LOAD your regular boot when this appears, or add a line which reads:

```
95 LRUN flp1_ProgramName
```

where "ProgramName" is the name of the program you wish to LOAD at the given CLIENT station (substitute 'EXEC_W' for 'LRUN' as necessary).

It's not a perfect system, and each participating QL requires SuperTOOLKIT coding. But, NETWORKing capability is there if the need ever arises.

HAPPY TRAILS, AND COMPUTING,
TO YOU. . .

Why Can't Johnny Write?
by
Bob Swoger

People keep saying to me "Why not move away from Sinclair and try another computer?". I have had this Timex/Sinclair 2068 since Christmas of 1983, a gift from my wife. I was in the first group at Motorola to get the ZX80. When the ZX81 came out as a kit I was one of the first to get one. That little

machine was very friendly indeed! Motorolans had long known the secret of high viscosity mineral oil so we had no problems with RAM-PACK connector crashes as did the rest of the Sinclair community. (Use only on electrical connections and keep away from rubber like that under the T/S2068 keyboard buttons.)

Most of our group had been programming IBM, Xerox Sigma IX and Hewlett Packard 9830s since about 1973. When we sat down to the keyboards of Commodore PET & VIC-20, Atari, and Radio Shack TRS80 & Color Computer and entered a short program that on other machines had given desired results we were frustrated by these new machines giving us only "SYNTAX ERROR" and error report codes on their screens. Dartmouth BASIC had been corrupted by _Soft (=Micro, the worst offender) to the point that we "noncomputer types" could no longer get results from these new personal computers in the language invented for us!

Back in 1980 the computer types of the Motorola MicroComputer Club asked us ZX80 owners, none of which were in the club, to show our wares. Many of them had built their own computers at home in the '70's and almost 300 of them aquired the Radio Shack Color Computer appliances when they became available. They had been writing their own software to accomplish tasks but in this new appliance age they switched over to canned software and the typing in of articles from magazines. Now the magazine type-ins were good because these appliance operators would add their own ideas to the programs and their minds were kept active. They wondered why we "non-computer types" went with the \$79 Sinclairs with membrane

keyboards. My answer came rather quick and drew laughter. "I have a wife, a nine year old daughter and a cat at home and I wanted something there that would do what I asked it to!"

They seemed to be losing interest in writing as time went on because of the limitations of the Soft-BASIC in their machines inhibiting any good and creative idea they tried.

It did seem, though, that the Cambridge BASIC in the Sinclair machines knew English! Also, the Sinclair machines checked the syntax as we typed in our programs. If we typed in a bad line the little syntax checker flashed a flag at the offensive point in the line jogging our ever failing memorys with a "RIGHT HERE, DUMMY!" so that we do not put a bad line into our program. This made writing on Sinclairs even easier than on the DARTMOUTH BASIC machines.

One evening, after both of us tried for a half an hour to write a program on his VIC-20, a friend asked why I thought my machine was better than his when it came to writing BASIC program. Not being anywhere near my home we went to his local K-MART store and I began composing a short game program on their T/S1000 display machine. I would run it again and again as I composed it and the sales person for that area, realizing what was going on, grabbed a pencil and paper. Not sure if what I was doing was OK to do, I asked him if I should stop what I was doing. He said "No, go ahead" and I did. He wrote down everything I entered! This is what I wrote. 'F' FIRES the photon torpedoes and the arrow keys move the ENTERPRISE around the screen.

```
1 LET X=15
```

```
2 LET Y=10
1000 PRINT AT Y,X;"6F";
1010 LET U$=INKEY$
1020 IF U$="F" THEN PRINT "....
...";AT Y,X+2; "^^^^^^"
1030 PRINT AT 21,0;"^^^^^^^^^^
^^^^^^^^^^^^^^^^^^^^";AT 21,RND
*31;". ";AT Y,X;"^^"
1040 LET X=X+(U$="8")-(U$="5")
1050 LET Y=Y+(U$="6")-(U$="7")
1060 SCROLL
1070 GOTO PI
```

(Lines 1000,1020 and 1030 are all graphics characters between the quotes. ^ is a graphics space.)

Just a few lines got so much action on the screen. Another reason the machine was very easy to control was the simplicity and completeness of the manual the English provided. The English are not verbose and tell all in very few words. The only fooling around they seem to do is their sly use of G\$. The American/Asian machines had fat folder sized manuals printed on coloring book paper which contained thousands of word that said less than half of what a writer needed to know. And if you looked deep enough just sometimes they might even tell you that expected BASIC operations would not work on their machines or if they did might even work backwards!

The split screen and screen rewrite features of the Sinclair machines make screen control as easy as slicing cheese!

```
10 POKE 16418,0
20 FOR I=1 TO 24
30 PRINT "^^^^^^^^^^CHEESE"
40 NEXT I
50 FOR I=23 TO 1 STEP -1
60 POKE 16418,I
70 FOR J=24-I TO 0 STEP -1
80 SCROLL
90 NEXT J
```



```
100 NEXT I
110 POKE 16418,2
```

(Again ^ means space.)

No wonder I didn't rush right out and get a T/S2068 when it came out but now I am very "into" this fine machine. The screens are more fun and it is just as easy to write on. So now, as those about me are moving up to the \$2200 IBM clone systems 'for more power', I am still doing more and more with my T/S2068 as there seems to be no limit to what it can do with very little investment.

The clone owners tell me that their families still can't use their new machines because they are too complicated for non-computer type family members. And even these computer types can't do things on their machines as quick and easy as the T/S2068 does it. They have abandoned writing altogether and become the slaves of canned programs.

At a class in which I was the instructor I made the comment that the Sinclair could preform the task of a scientific calculator using only about 6 lines of BASIC. I was asked to prove it and I did but it only took three lines!

```
10 INPUT "What's your problem?";G$
20 LET A=VAL G$
30 PRINT G$;"=";A
```

Enter a formula to solve but try to keep it down to less than about 730 characters as the little Sinclair warning buzzer will start to sound. The strings in the T/S2068 are capable of being over 18000 characters long without being dimensioned and will still work in the VAL statement! If your Sinclair already knows the values of some variables put

them into the formula also and just GOTO the first line instead of RUNning the program, it will still work! Try this on any other machine and if you find one that runs this program write me and let me know, I may invest in one should I ever tire of my T/S2068. A friend who has been programming for 20 years says that even IBMs can't come to the keyboard for a val request!

When will I switch? Only when I can move up to a machine that can do at least what I can do now will I lay aside my T/S2068. Never mind a machine that does FORTRAN, C, PASCAL, ATRAN, APL or any others when a machine exists that does BASIC the way Dartmouth intended! (Thank you, Cambridge.) I love to write in BASIC and I hate limitations! I prefer output, not the challenge of programming!

Why can't Johnny write? Maybe it's his BASIC! It is really no fun to write on a buligerent machine and poor Johnny quickly loses interest in writing when all he gets is SYNTAX ERROR and ERROR CODES. Maybe getting him one of those machines with a mouse and pull down windows made for the functionally illiterate with games and all kinds of software will get him in front of the computer again? Sure, he will be doing things on the computer but not getting to know computing. Don't worry, though. He'll probably become the manager of some big corporation and they all use that type of machine!

THE CATUG TELECOMM HOME-PORT
By
Bob Swoger

The CATUG BBS is a 24 hour 3 phone line BBS written on a Digital Equipment Corporation PDP11/60 using a Timex/Sinclair

2068 with MTERM Smart II software. The board controls the screen of your 2068 so that there is a minimum amount of scrolling.

Byte-Back's SpectraTERM 1.30 screen control is supported but not its uploads and downloads as its file transfer controls are nowhere documented.

Specterm-64 and ZTERM64 have been tested and found to be inferior on this BBS system as neither has screen control and other functions commonly used on minicomputers are missing.

MAXCOM has not yet been fully tested but may be useful for host to disk transfer.

The BBS handles UPLOADS and DOWNLOADS of both TEXT (none) and HEX modes of MTERM. For the proper screen widths use TASWORD II with a right margin of 31 right justified for text documentation and newsletter inputs and a right margin of 30 for MAIL on uploads.

Use HEX to upload and download all Timex BASIC and Machine Code programs.

The Bulletin Board System is structured in a TREE fashion. Select 0 to back out of the BBS and 1 through 9 to head down the path you desire. The first board looks like this:

MAIN BULLETIN BOARD

=====

- 1)DIALBACK INSTRCTNS
 - 2)COMMUNICATION SCTN
 - 3)MEETING INFO, NEXT> 08-APR-89
 - 4)SYSTEM ORIENTATION
 - 5)DOWNLOAD PROGRAMS 27-FEB-89
 - 6)UPLOAD PROGRAMS
 - 7)BUYING SERVICE 02-DEC-88
 - 8)MESSAGE BASE 28-MAR-89
 - 9)ADS, DATABUS, INFO 23-SEP-88
- ENTER SELECTION ->

Selecting 4) will show you all

you need to know to fully operate the system. Have your buffer open while you read all 9 selections under 4) and when you print out this capture later, you will have a manual of what it takes to fully get around in the system. Most users from outside the Chicago area will not wish to 'GET INTO' the BBS this much due to the connect time. Most out of towners will only want the upload and download service, the newsletters and the message base sections.

It is IMPORTANT to remember that CONTROL Z gets you out of most problems, especially in the MAIL mode where you use CONTROL Z to terminate the REPLY> mode. In the BBS mode, however, Control Z returns you to where you had just been. In the BROADCAST mode CONTROL Z will repeat the last message you sent when you are in the communication section. To download a file, first be certain that your buffer is empty and closed and that you are in the correct transfer type mode.

Next enter 5 at the MAIN BULLETIN BOARD prompt. When the DOWNLOAD BOARD appears on your screen select 1 to see the list of programs and write down the name of the one you wish to download. Next select 3 and then enter the program name. Your buffer will be opened and the program loaded in. After the transfer your buffer is closed and after logging off the SYSTEM you can Exit to BASIC and SAVE the program.

If you wish to upload a file, first be certain that your buffer is loaded with the file you wish to upload and you are in the correct transfer type mode. Next enter 6 at the MAIN BULLETIN BOARD prompt. When the UPLOAD BOARD appears on your

screen Select 2) to upload a file into your DIRectory. This utility is an unprompted ASCII upload half-duplex utility so you will have to go into the half-duplex mode to see the transfer happen. Send CONTROL Z after the upload.

Next, go to the COMMUNICATIONS section and tell the SYSOP by MAIL the name of the file that you uploaded and it will be moved to the DOWNLOAD section of the BBS.

To get into the our BBS dial 312/576-7072 in Palatine, Illinois and hit ENTER a few times to get the > prompt. Next type: LOG SINCLAIR/GUEST
If you have a BYTE-BACK modem answer "Y" at the prompt. After exiting the BBS type BYE and hang-up your phone line as this is the only way to disconnect from our system.

Remember that you are a guest on the system so please act accordingly. This is a minimum security BBS and you can CRASH it easily. Logoff by typing BYE when you are finished.

NITE-TIMES CLASSIFIED

To put an AD on the BBS and this newsletter, put a file in your account with the filename.filetype: COMPUTER.ADS

AD BY: JIM PEULECKE ON 880205

TANDY MODEL 100 PORTABLE
COMES WITH BASIC AND THREE
APPLICATION PROGRAMS BUILT IN.
EXTRAS INCLUDE 32K OF RAM,
PROTECTIVE 'SKIN' OVER FRONT,
SOFT CASE, HARD CASE, AND OF
COURSE, BUILT-IN MODEM.
!!! LIKE - NEW CONDITION !!!
.\$350.00 OR BEST OFFER.....
CONTACT JIM PEULECKE
W815-744-1545 or H815-886-4648

AD BY: BOB SWOGER ON 880216

MF-100 384K MULTIFUNCTION CARD
& MFPLUS for IBM PC-XT or Clone
Includes: RAMDISK, RAM HELP,
DISKCONF, PSPOOL, PSPLHELP,
PSPL CONF, CLOCK-CALENDER.
BOTH FOR\$100 or Best
BOB SWOGER W312-576-4410 or
H312-837-7957

IBM XT CLONE 640K 8MHz 8087
30MEG HD 360K FLOPPY srl/prll
PORTS, CLCK/CLNDR GENIUS MOUSE
VEGA VGA NEC MULTISYNC II
PANASONIC 24 pin Printer WORD
4.0 for TRAN 4.1.....\$2200
397-3807

FOR SALE

Color Computer 2 with 64K,
Extended BASIC, dual disk
drives with independent power
supplies, Multipak, J&M
controller with RS1.0,1.1, and
JDOS. Also Digisector DS69A
video digitizer, joysticks, HAM
Radio FAX, Slow scan and RTTY
software, more. All like new,
less than 1 year old. \$500.00
complete. Contact Don Froula at
590-5028 (days).

FOR SALE

Televideo 610 Communications
Terminal; CRT excellent,
manual, box, and works...\$75.00
CALL Ray DuBiel X65862.

AD BY: STEVE HART ON 880317

HARDWARE

Color Computer W/64K, Extended
BASIC, enhanced keyboard....\$30
Enhanced Keyboard (IBM type)
.....\$10

CoCo chicklet Keyboard
(2 available)\$5 ea
300 baud acoustic coupled modem
.....\$5

CoCo joysticks, One pair\$5

BOOKS

The complete rainbow guide to
OS-9 by Dale L. Pucket and
Peter Dibble \$8

TRS-80 Computer Reference
Handbook by William Barden, Jr.
.....\$3

Assembly language graphics for
the TRS-80 Color computer by
William Barden Jr.\$5

Color computer graphics by
William Barden Jr.\$3

TRS-80 Color Computer Assembly
Language programming by Don &
Kurt Inman (with Dymax)\$10

SOFTWARE

Tom Mix "P51" Flight Simulator
(cassette version)\$5

CER-COMP "DATAPACK"
Communication Terminal package
(cassette version)\$5

Home Phone: 658-9518 or
Work Phone: 590-5705

LEADING EDGE GREEN SCRN MONITOR
%%
GREEN SCREEN 13" MONITOR HAS
LESS THAN 100 HOURS. PURCHASED
1987 IBM TTL DB-9 CONNECTOR.
CONTACT: BRUCE EASTMOND
W312/576-2112 H 312/969-6603
C L E A N ! \$50

%%

.....SAMSUNG COLOR RGB.....

Model CD 1464W \$239

Diagonal 13 inches

RGB Color Graphics card \$39

John Champlin 480-5225 w
520-1534 h

For Sale

%%

CoCo II 64K Extndd\$40

CoCo III 128K\$110

CoCo III 512K w/remote HJL

ProCase 57 Keyboard\$300

HJL CoCoIII keyboard\$55

HJL NumberJack numeric KyBd.\$45

Magnavox Amber monitor/snd .\$.75

Magnavox Color 8CM515\$250

MultiPac intrfc (upgrdd) ...\$.65

Seagate ST225 20mg HrdDrv w/cs,

pwr sply, cntrlr\$265

Burke&Burke XT-RTC Hard Drive

intrfc w/sftwr\$75

PBJ WordpacII w/sftwr\$50

ADC 1200 bd mdm ad/aa\$75

CCR-82 Cmptr Cassette w/ps .\$.25

Joystiks pr.\$10

RS-232 Pak\$25

Software

OS9 Level 1 ver1&2\$25

PRO-COLOR-FILE, FORMS, MASTER

DESIGN, SIDE WISE, DIR, &

TELEGRAPHICS\$35

ELITE FILE & DESK\$30

STYLOGRAPH (OS9 WRDPC)\$40

CGS IMS OS9 (dbase II)\$75

XTERM OS9 Cmnctns\$25

Check09 MultiView\$15

CoCo III 512K RAM disk\$10

NUKE the Love Boat CoCoIII .\$.15

O-PAK (lv11 OS9)\$10

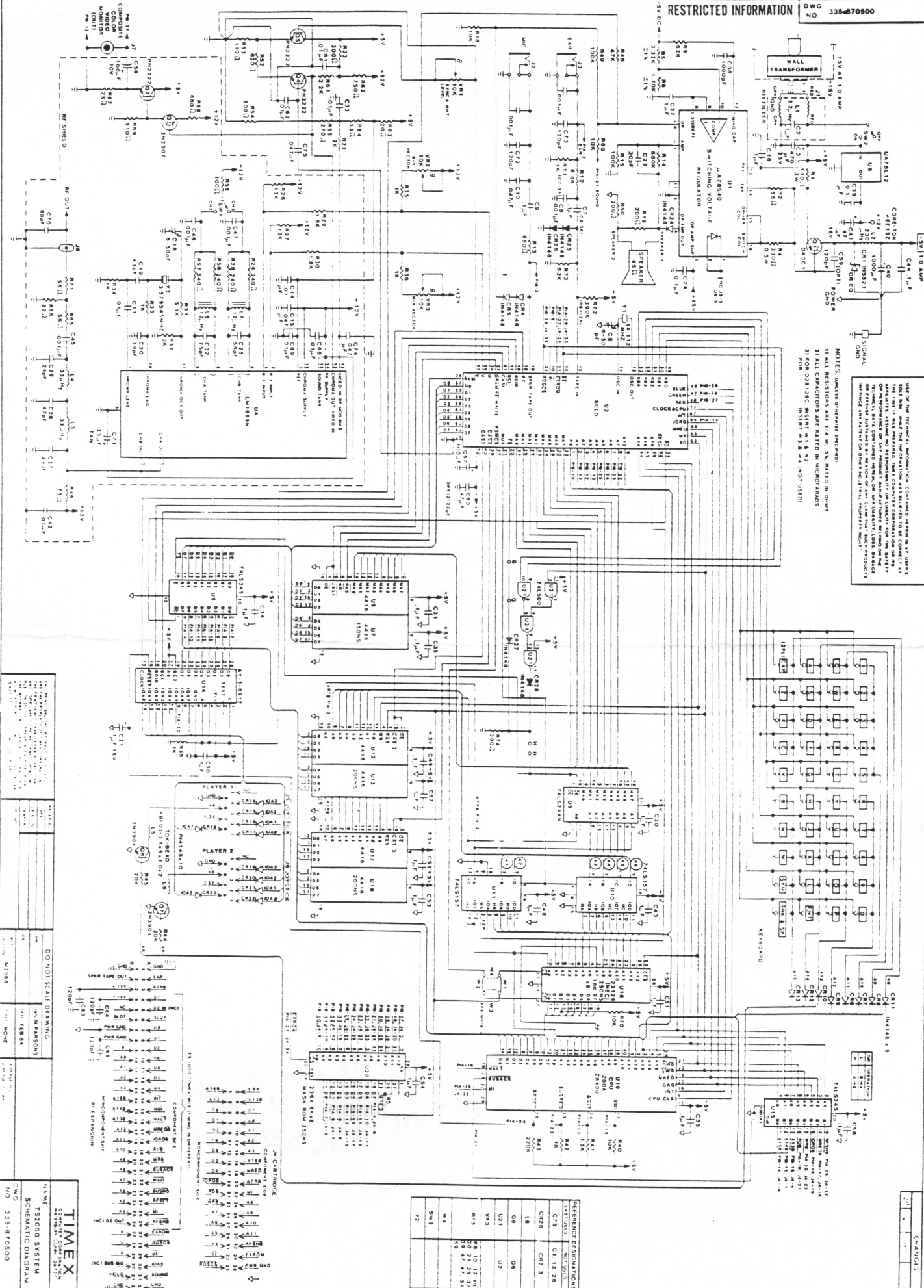
Christmas Fantasia II tunes \$15

CHESSD (CoCo II)\$15

CMAILIST\$10

Contact:

Rich Ekstrom



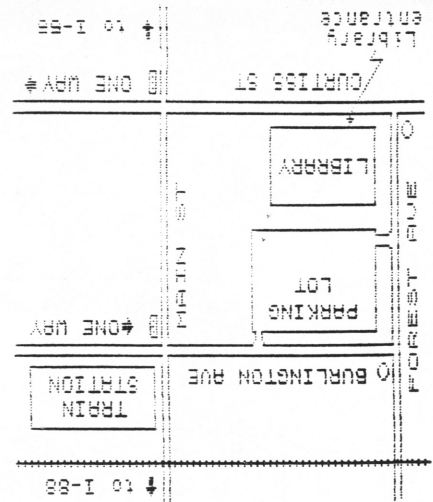
NOTES: (UNLESS OTHERWISE SPECIFIED)
 1) ALL RESISTORS ARE 1/4 W. 5% TOLERANCE IN OHMS
 2) ALL CAPACITORS ARE RATED IN MICROFARADS
 3) FOR DIMENSIONS, REFER TO DRAWING 335-870500 FOR

DO NOT SCALE DRAWING

| ITEM | DESCRIPTION | QTY | UNIT |
|------|---------------|-----|------|
| 1 | RESISTOR 10K | 10 | PCB |
| 2 | RESISTOR 100K | 5 | PCB |
| 3 | RESISTOR 1M | 2 | PCB |
| 4 | RESISTOR 10M | 1 | PCB |
| 5 | RESISTOR 100M | 1 | PCB |
| 6 | RESISTOR 1K | 10 | PCB |
| 7 | RESISTOR 10K | 10 | PCB |
| 8 | RESISTOR 100K | 5 | PCB |
| 9 | RESISTOR 1M | 2 | PCB |
| 10 | RESISTOR 10M | 1 | PCB |
| 11 | RESISTOR 100M | 1 | PCB |
| 12 | RESISTOR 1K | 10 | PCB |
| 13 | RESISTOR 10K | 10 | PCB |
| 14 | RESISTOR 100K | 5 | PCB |
| 15 | RESISTOR 1M | 2 | PCB |
| 16 | RESISTOR 10M | 1 | PCB |
| 17 | RESISTOR 100M | 1 | PCB |
| 18 | RESISTOR 1K | 10 | PCB |
| 19 | RESISTOR 10K | 10 | PCB |
| 20 | RESISTOR 100K | 5 | PCB |
| 21 | RESISTOR 1M | 2 | PCB |
| 22 | RESISTOR 10M | 1 | PCB |
| 23 | RESISTOR 100M | 1 | PCB |
| 24 | RESISTOR 1K | 10 | PCB |
| 25 | RESISTOR 10K | 10 | PCB |
| 26 | RESISTOR 100K | 5 | PCB |
| 27 | RESISTOR 1M | 2 | PCB |
| 28 | RESISTOR 10M | 1 | PCB |
| 29 | RESISTOR 100M | 1 | PCB |
| 30 | RESISTOR 1K | 10 | PCB |
| 31 | RESISTOR 10K | 10 | PCB |
| 32 | RESISTOR 100K | 5 | PCB |
| 33 | RESISTOR 1M | 2 | PCB |
| 34 | RESISTOR 10M | 1 | PCB |
| 35 | RESISTOR 100M | 1 | PCB |
| 36 | RESISTOR 1K | 10 | PCB |
| 37 | RESISTOR 10K | 10 | PCB |
| 38 | RESISTOR 100K | 5 | PCB |
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| 89 | RESISTOR 100M | 1 | PCB |
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| 95 | RESISTOR 100M | 1 | PCB |
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| 97 | RESISTOR 10K | 10 | PCB |
| 98 | RESISTOR 100K | 5 | PCB |
| 99 | RESISTOR 1M | 2 | PCB |
| 100 | RESISTOR 10M | 1 | PCB |

TIMEX
 TS1000 SYSTEM
 SCHEMATIC DIAGRAM
 DWG NO 335-870500

THE CHICAGO AREA TIMEX
 USERS GROUP MEETS AT 12:00
 ON THE THIRD SATURDAY OF
 EVERY MONTH IN THE
 CONFERENCE ROOM OF THE
 DOWNERS GROVE PUBLIC
 LIBRARY LOCATED AT 1050
 CURTIS STREET IN DOWNERS
 GROVE



CHICAGO AREA TIMEX USERS GROUP
 1885A YORKTOWN AVENUE
 GREAT LAKES, ILLINOIS 60088

